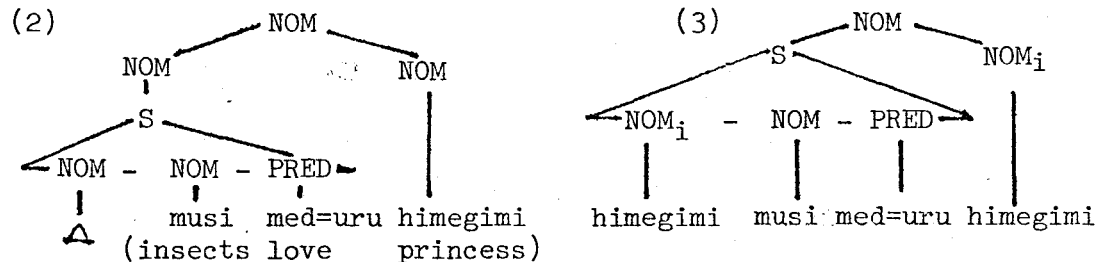


A Non-Relative Analysis of So-Called Relative Clauses  
Katsue Akiba  
U.C.L.A.

0. It seems to be a tacit assumption in the past studies of relative clauses that relativization is a universal phenomenon and thus every language has relative clauses. My purpose here is to demonstrate that languages do not necessarily have syntactically definable relative clauses and to make clear that, if relativization is universal, it is universal only in the sense that every language has translation equivalents of English relative clauses. More specifically, I will propose that relative clause equivalents ("relative clauses", hereafter) of Old Japanese (OJ, henceforth)<sup>1</sup> are nominal clauses and the process involved in the formation of "relative clauses" is not relativization but nominalization. That is, such complex nominals as (1) are derived from such structures as (2) by nominalizing (i.e. attaching the nominalizing suffix to the predicate) the embedded S rather than from such structures as (3) by a process of deletion of  $NOM_i$  in the embedded S.

- (1) musu med=uru himegimi (Tsu, 376)  
insect love=URU princess  
'a princess who loves insects'  
(N.B. Refer ahead for the suffix URU.)



The symbol  $\Delta$  in the embedded S in (2) indicates an unspecified nominal which plays an important role in the semantic interpretation of nominal clauses. The nominal clause musu med=uru, for example, its subject being unspecified, is interpreted as a subject nominal which can be at best translated into English as 'insect lover' or 'one who loves insects', both of which fail to reflect what this OJ expression really is. The nominal construction (1) specifies in total the class whose members both love insects and are princesses. In order to justify this analysis, I will first show that "relative clauses" are formally identical with other clauses which are less controversially analyzable as nominalizations; then, I will demonstrate that, given this non-relative analysis, a complex nominal like (1) can be regarded as an associative construction [NOM - ASS - NOM] without an overt associative particle; and finally I will discuss some theoretical consequences of this analysis.

1. In OJ, several different suffixes appear in clause final position attached to the last element of the predicate. Although their functions are not well understood, there are significant correlat-

ions between such suffixes and the grammatical status of the clause. The final clause (i.e. the clause at the very end of a sentence) is always marked by U<sup>2</sup> except in interrogatives, imperatives and certain emphatic sentences. Among non-final clauses, we are presently concerned only with those marked by URU (URU-clauses, hereafter).

First, consider the URU-clauses (which are set off by square brackets) in the following examples. (English translations are intended to be as direct as possible.)

- (4) [reino kokoronasi                  no kakaru waza wo s=i- te sainam=a-  
usual inconsiderate+one ASS such act DO do=I-SS scold=A-  
r=uru] koso ito kokorozuki naker=e. (G, 187)  
PASS=URU EMPH very liking not+be=E

'It is indeed not likable that the usual inconsiderate one has done such an act and is scolded.'

- (5) [Kaguyahime no yamome        nar=u]    wo nagekas=i-ker=e-ba...(T, 43-4)  
Kaguyahime ASS unmarried COP=URU DO lament=I-PAST=E-DS

(N.B. The hyphen '-' is used to indicate morpheme boundaries and the equal sign '=' to separate the stem part and the suffixal part of a verbal element, verb, auxiliary, adjective. SS and DS represent the same subject marking conjunctive particle and a different subject marking conjunctive particle, respectively. The plus sign '+' in the English gloss shows either that the two English morphemes correspond to a single OJ morpheme or that the corresponding OJ morphemes are inseparable because of phonetic fusion.)

Notice that the URU-clause is in the subject position in (4) and in object position (being marked by the direct object marker wo) in (5). Such URU-clauses we will call nominal clauses, by which we simply mean subordinate clauses that occur as nominal arguments of other clauses. Nominal clauses are different from independent (i.e. final) clauses not only in the clause final suffix but also in the way in which the subject is marked; the subject, if present, is generally marked by the associative particle no/ga<sup>3</sup> in nominal clauses while it is left unmarked in independent clauses.

Now, compare the nominal clauses above with the "relative clauses" in the following examples.

- (6) [wa ga motom=uru] yama ... (T, 38)  
 I ASS look+for=URU mountain  
 'the mountain that I am looking for...'

- (7) [otoko no ki- tar=i- ker=u] kari ginu ... (Ise, 111)  
 man ASS wear=I-PERF=I-PAST=URU hunt robe  
 'the hunting robe that the man was wearing...'

Notice that "relative clauses" are like nominal clauses in that their predicates are marked by URU and their subject by no/ga. One might, however, consider "relative clauses" to be visibly different from nominal clauses because one argument is missing. For example, the subject and the object are missing from the "relative clause" in (1).

(6)-(7) 100

(6) and (7), respectively. However, since presence of a nominal is not obligatory in OJ surface clauses, this difference is only apparent. "Relative clauses" and nominal clauses differ only in their syntactic contexts: the former occurs in construction with another nominal forming a larger nominal unit while the latter occurs in construction with the predicate.

The question that arises at this point will be: Why is there such complete formal agreement between the "relative clauses" and the nominal clauses? The answer can be either diachronic, claiming that both clauses have a common origin: or it can be synchronic, in which case both "relative clauses" and nominal clauses have the same grammatical status. We take the latter position, keeping in mind that a sharp distinction between synchronic and diachronic is in most cases unrealistic, and propose that all URU-clauses are nominal clauses which may be formally represented as [S]<sub>NP</sub>. We further make the following assumptions about the URU-clauses for reasons that will become clear in the following section.

- (8) i. A nominal clause may contain an unspecified nominal.  
 ii. A nominal clause with an unspecified nominal is interpreted according to the grammatical function of the unspecified nominal within that clause.

2. Along with nominal clauses like (4)-(5), OJ has nominal clauses such as the following.

- (9) [iyasiki otoko motar=u] sihasu no tugomori ni  
 low+classy man have+be=URU December ASS last+day OBL  
 uhe no kinu wo arah=i-te... (Ise, 135)  
 upper ASS robe DO wash=I-SS

'the one who had a low class man washed his upper robe, and...'

As seen from the English translation, the URU-clause in such examples is interpreted as a subject nominal. The URU-clause in the following example is still different in its interpretation.

- (10) [mukasi kasikoki tenziku no hiziri kono kuni ni  
 long+ago holy India ASS priest this country OBL  
 mot=e=watar=i-ker=u] nish no yama dera ni ar=i. (T, 12)  
 bring=I- PAST=URU west ASS mountain temple OBL be=U

'(the one) that a holy Indian priest had brought to this country is in a mountain temple in the west.'

The semantic head of this nominal is the direct object of the predicate 'to have brought'. Why are these URU-clauses understood differently from those in (4)-(5)? One thing we note is that the subject and the object are missing from the URU clauses in (9) and (10), respectively, and these missing nominals seem to have bearings on the interpretation of these URU-clauses. However, the missing argument in an URU-clause does not ensure a subject or object interpretation of that clause. An URU-clause may get a sentential nominal interpretation even when its subject or object is missing as in the following example.

- (11) [tada kaher=a-mu]           mo    sauzausi.                       (Tsu, 383)  
just return=A-FUT=URU also unsatisfactory  
'That (I) justwill return is also unsatisfactory.'

Also, an URU-clause may miss both the subject and the object and yet it may be interpreted as a subject nominal rather than as an object nominal or vice versa.

- (12) [omoh=u]    wo ba    omoh=i, ...                      (Ise, 146)  
        love=URU   DO EMPH love=I  
        '(people) love those who love them, and ...'

What seems to be crucial for the interpretation of an URU-clause with missing arguments is how the missing arguments are interpreted.

As previously mentioned, nominals are not obligatory in OJ clauses. Clauses consisting of predicates alone are commonly found in the literature. Semantically, however, every predicate is associated with one or more arguments, and, if such arguments are not present on the surface, they are construed as "anaphoric", "generic" or "unspecified" nominals. Consider the following.

- (13) mi-so        wo tor=i-id=e-te ki-        s=e-        mu        to        s=u. (T, 65)  
HON-dress DO take+out=I-SS wear=I-CAUS=A-FUT=U COMP do=U  
'(They=people from the MoonLand) took out the dress, and  
tried to make (her=Kaguyahime) wear (it=the dress).'

- (14) soko            wo Yatuhasi to    ih=i- ker=u        ha ... (Ise, 116)  
that+place DO Yatuhasi COMP call=I-PAST=URU TOP  
'that (they=people in general) called that place Yatuhasi is...'

- (15) sore ni ha iro=iro=no tama no hasi wataser=i. (T, 38)  
 that OBL TOP various jewel ASS bridge build+over+PERF=U  
 'There was a bridge of various kinds of jewels over that.'  
 (Lit: (Someone) has built a bridge of various jewels over that.)

As indicated in the English translation, in (13) the subject of the first clause and the indirect object (i.e. causee) and the direct object of the second clause are unambiguously recoverable from the context. The subject of the predicate 'to call' in (14) is not identified with any previously mentioned nominal but it is understood as 'people in general'. Example (15) is difficult to translate into English. It is an active transitive sentence and the subject (i.e agent) of the action of building a bridge over the river is intuitively expected. But the speaker is focusing on the situation resulting from the action and considers the person(s) who brought that situation about irrelevant or redundant.

An examination of nominal clauses with missing arguments shows that an URU-clause is interpreted as a subject or object nominal if an argument is missing from it and if the missing argument is unspecified as in (9) and (10). The reason why the URU-clause in (11), in which the subject is missing, is not interpreted as a subject nominal will then be because the missing subject is readily interpreted as anaphoric. The URU-clause in (12) is understood as a subject nominal because its missing subject is interpreted as unspecified while its missing object is inferred as coreferential to

the generic subject of the clause to which this URU-clause is embedded through an extremely complex process of inference.

In the following section, I would like to show that such complex nominals as (1), (6) and (7) (i.e. "relative clause constructions") will be conveniently treated as associative constructions together with simpler [Noun - Noun] constructions, if this interpretive process of nominal clauses is applied for "relative clauses".

3. OJ has two types of associative constructions, those with the associative particle as in (16) and those without as in (17). The latter, being historically older than the former, is somewhat limited in use.

- (16) a. wo no waraha: male ASS child 'boy'  
 b. ani no Dainagon: big+brother ASS Chief+Councillor  
     'the Chief Councillor, who is (her) big brother'  
 c. saubu no kami: iris ASS paper 'paper dyed with juice extracted from iris flowers'  
 d. Yukihiro no musume no hara: Yukihiro ASS daughter ASS abdomen  
     'Yukihiro's daughter's own child'
- (17) a. onna harakara: woman sibling 'sister'  
 b. Udaizin Abe=no=Mimuradi: Right+Minister Abe=no=Mimuradi  
     'Abe=no=Mimuradi, who is the Right Minister'  
 c. humi hako: letter box 'box in which letters are kept'  
 d. morokosi bune: China boat 'boat from China'

Notice that the relationship between the two nouns is not the same from one example to another. In an attempt to capture various readings of Akan associative constructions by interpretive rules, Boadi (1975) had to introduce such a semantic feature as [+Base] as an inherent feature of the first noun in associative constructions such as nkate knwan 'groundnut soup'. It seems to be simply impossible to account for all possible meanings of associative constructions with a limited number of interpretive rules. We consider that associative constructions themselves are not signaling anything more than that the first noun is "modifying" the second and that their exact meanings are inferred based on the speaker and hearer's pragmatic knowledge about the two associated nouns and the way the nouns are distributed in the speaker and hearer's concept of the world. Kirsner and Thompson (1973), following García (1975), have distinguished the meaning of a linguistic signal and the message communicated with that meaning. They say, "the message is totality of what is inferred from the use of the meanings in a given utterance in a particular context" and "typically, the message communicated is richer than the meaning signaled". The associative construction under consideration seems to be one of the areas in the grammar of OJ (perhaps in any grammar) where pragmatic inference plays a crucial role in the semantic interpretation. The lexical meanings of the two associated nouns provide only clues to more exact interpretations of associative constructions. The semantic relationship between the two nouns in the associative construction is basically of three types: the first noun intersects the second (e.g. (16)a and (17)a), the two nouns are disjoint (e.g. c and d in (16) and (17)), or the second noun is contained in the

first noun (e.g. (16)b and (17)b). In the first two types, the first noun modifies the second by restricting the class of the second noun to its smaller subclass. In the third type, on the other hand, the first noun does not have such a restrictive function. Of the two restrictive types, the first type is more straightforward in the interpretation than the second one. It specifies the intersection of the two nouns. The interpretation of the second type varies from case to case. The relationship between the two nouns will be genitive, locational, resultative or some idiosyncratic one which is difficult to name.

Considering "relative clause" constructions as associative constructions, it will not be too difficult to see why URU-clauses in (1), (6) and (7) are translated into English relative clauses. Complex nominal (1), for example, consisting of two nominals the set of people who love insects and the set of princesses, specifies in total the intersection of the two sets. Thus, in effect, it is the same as the English relative clause construction a princess who loves insects except that, since OJ nouns are not marked for definiteness or number, the OJ complex nominal is ambiguous as to whether it refers to any member(s), some particular member(s) or all of the members of such a class.

Nonrestrictive "relative clauses" such as the following will also be understood in parallel to simpler associative constructions.

- (18) [ake kure mi- nar=e- tar=u] Kaguyahime (T, 61)  
 morning evening see=I-accostome=I-PERF=URU Kaguyahime  
 'Kaguyahime, whom (they) have been accostomed to see every morning and evening...'

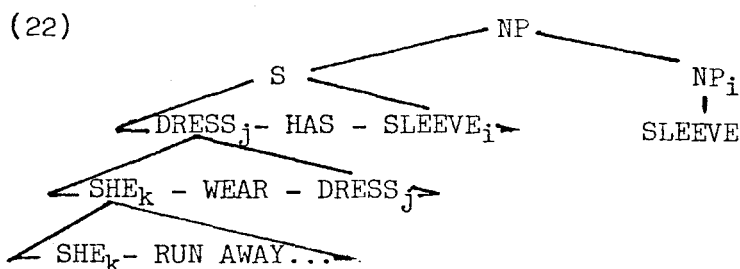
It is not the structure but the fact that Kaguyahime is the name of a person that leads one to the nonrestrictive interpretation.

Now, consider the meanings of the complex nominals in the following examples.

- (19) [nig=e- te ir=u] sode wo torah=e-tamah=e-ba...(T, 58)  
 run+away=I-SS enter=URU sleeve DO catch=I-HON=E- DS  
 '(he) caught the sleeve (of the kimono of Kaguyahime) who was running away (from him) and entering (the house), and...'
- (20) [kami nar=u] sahagi ni e- kik=a- zar=i- ... (Ise, 114)  
 thunder roll=URU noise OBL can-hear=A-not+be=I  
 '(he) could not hear (her cry) because of the noise which (was made at the time when) the thunder rolled...'
- (21) [Sikibu=kyoo no himegimi ni asagaho tatematur=i-si ]  
 Sikibu=kyoo ASS princess OBL morning+glory present=I- PAST=URU  
 uta ... (G, 90)  
 poem  
 'the poem which (Genzi composed and sent to her together with it at the time when) (he) presented a morning glory to the princess of Sikibu=kyoo...'

Confronted with Modern Japanese examples similar to these, McCawley (1972) has suggested that they may be analyzed as relative clause constructions in which the S (=our URU-clause) is not the relative

clause but merely a constituent of it. That is the complex nominal in (19) is derived from a structure as in (22) by deleting intermediate relative clauses.



However, the possibility of stating the condition on such a radical deletion is extremely tenuous. It seems that what must be postulated as intermediate clauses is something that hearers can infer based on their pragmatic knowledge about what is linguistically expressed. In our analysis, such complex nominals as these will be regarded as associative constructions of the third type we discussed above, namely, associative constructions in which the semantic domains specified by the two nominals do not intersect. For example, the complex nominal in (19) consists of an URU-clause specifying 'ones who run away and enter (the house)' and a noun specifying the set of sleeves, which cannot intersect. Therefore, the way in which the first nominal restricts the second must be inferred based on such assumptions as "a sleeve is part of a kimono", "the one who runs away and enters (the house) is wearing a kimono", and so on. The interpretation of (21) is much more culture-oriented. A sentence like this would be simply puzzling to the hearer who does not know that composing a poem and sending it together with a flower to a girl was a very sophisticated but commonly practiced means of courtship in OJ society.

We have not discussed "relative clauses" on oblique nominals such as nominals of Time, Place, etc. There are complex nominals consisting of an URU-clause and a noun referring to Time (e.g. yoru 'night', sunahati 'moment', toki 'time' and tosi 'year'), Place (e.g. tokoro 'place', ihe 'house', ta 'rice field'), etc., which will be translated into English oblique relatives. Such constructions are also analyzed as associative constructions together with simpler associative constructions such as maturi no yoru (:festival ASS night) 'the night when there is/was a festival' although we will not go into details, here.

Finally consider the following example.

- (23) [kiku            no hana    no uturoher=u]    wo or=i ..(Ise, 22)  
 chrysanthemum    ASS flower    ASS fade+PERF=URU    DO pick=I  
 '(she) picked a chrysanthemum flower which had faded, and ...'

Kuroda (1974) has analyzed complex nominals as these as headless ("pivot-independent" in his term) relatives in which the subject kiku no hana functions as the semantic head (i.e. the "pivot"). Then, examples like this seem to counter to our hypothesis that it is the URU-clauses ~~with~~ an unspecified subject or object that are

interpreted as subject or object nominals. Recalling that the basic function of no is to connect two nominals rather than to mark the subject, however, the bracketed portion in this example is quite reasonably analyzed as an associative construction with the associative particle no. The meaning of this nominal will then be the intersection of the set of all chrysanthemum flowers and the set of all objects that have faded.<sup>4</sup>

In summary, we have shown that the particular kind of modifying-modified relationship between a "relative clause" and the head nominal need not be ascribed to the existence in the "relative clause" of a nominal coreferential to the head. If our analysis of OJ "relative clauses" is correct, then, OJ does not have relative clauses in such a syntactic sense as Anderson and Avery (1972) define:

"...if a subordinate clause modifies (a crucially undefined term) an NP, and does so by virtue of the fact that it contains in deep structure an NP coreferential to the modified NP, the clause is a relative clause." (37)

5. Having noted that the nominalizing morpheme is used in other subordinate clauses including relative clauses in many languages, Matisoff (1972) raised the question: Why are nominalizers used also as subordinators? This question will be automatically answered, if the non-relative analysis as proposed above is applied for such languages. That is, subordinate clauses marked by a nominalizing marker are in fact nominalized clauses. Matisoff has further pointed to the fact that the genitive (perhaps "associative" is a better term for the reason stated in footnote 3) marker assumes a form which is either the same as or similar to the relative and/or nominal marker. Consider the following examples from Lahu.

- (24) a. šîʔ-cě ve ó-qō: tree VE top 'the top of the tree'  
 b. [ò-šîʔ tōʔ la ] ve thà nò mâ ġa mò lâ  
 blood-was-coming-out VE DO you-see-not Q  
 'Didn't you see that blood was coming out?'  
 c. [vâʔ=ó-qō thàʔ cō tā ] ve yâ-mî=ma lē qhâʔ-šē=ma yò  
 pig's-head-DO -boiled VE woman head-man's-wife SP  
 'The woman who boiled the pig's head is the head-man's wife'

Chinese particle de exhibits exactly the same pattern.

- (25) a. feiji de chyan tour: airplane DE front 'the front of the airplane'  
 b. [dai yanjing de]  
 wear glasses DE  
 'the one(s) wearing glasses'  
 c. [dai yanjing de haizi  
 wear glasses DE child  
 'the child wearing glasses/the child who wears glasses'

(I owe Chinese examples b and c to Prof. Sandra Thompson, UCLA.)

If "relative clause constructions" in these languages are actually associative constructions, the appearance of the associative particle (ve in Lahu and de in Chinese) after the "relative clause" would not



be surprising at all, and associative markers marking nominal clauses will be explained as the result of the deletion of the second nominals of associative constructions. Since nominal clauses are not morphologically distinct from independent clauses in these languages, the associative marker in this position (after nominal clauses) is subject to the reanalysis as a nominalizer. The relationship between the genitive 'ai and the nominalizer/relativizer 'ai in Jighpaw must be already historical. The OJ suffix URU has no genetic relationship with the synchronic associative particle no/ga, but it is contended (e.g. Oono, 1952) that it is historically related to ra and ro, which are still found in OJ as associative particles although much fewer in number than synchronic associative particles no and ga.

The non-relative analysis seems to apply also for languages such as Mojave and Turkish, in which subject relativization and oblique relativization resemble subject(or agentive) nominalization and non-subject relativization, respectively.

In conclusion, it is important in universal or comparative studies of relative clauses to be clear whether we are handling special grammatical devices which are used exclusively for such meanings as are expressed by English relative clauses or some other grammatical constructions, such as associative constructions, which are exploited for the purpose of communicating such meanings. Our universal studies of relativization will be more fruitful when such a distinction is explicitly made.

#### FOOTNOTES

\* I am grateful to Prof. Sandra A. Thompson (UCLA) for all her suggestions and assistance.

1. By Old Japanese I mean the language used in the early Heian Period (approx. 9th and 10th centuries). The examples used in this study are mainly from Taketori Monogatari (T) 'Tale of a Bamboo-Collector', Ise Monogatari (Ise) 'Tale of Ise', Genji Monogatari (G) 'Tale of Genji', and Tsutsumi-Chuunagon Monogatari (Tsu) 'Tale of Tsutsumi-Chuunagon'. The page number indicated in the parentheses at the end of each example is based on the texts of the Iwanami Koten Bungaku Taikei 'The Iwanami Series of Japanese Classics'.

2. The surface form of a verb (stem=suffix) is determined by the syntactic context and the verb class to which the verb belongs. The symbols U, URU, etc. represent morphophonemic variants of the suffixes used in sentence final position, in clause final position of of what we consider nominal clauses, etc.

3. The particle no/ga are usually referred to as genitive. However, since the two nominals connected by them are not necessarily in a genitive relationship as will be seen from later examples, we will call them "associative particles" following Welmers (1963) and Boadi (1975).

4. We are obliged to account for the use of no that marks the subject of such URU-clauses as (4) and (5), which are difficult to analyze as associative constructions. One explanation that comes to my mind is that this is a case of analogical extension of the associative no on the basis of the similarity of the position in which the two nominals occur. That is, both the subject of an URU-

clause and the associative nominal are the first nominal element of a larger nominal construction.

## REFERENCES

- Anderson, S.R. & Avery D.A., 1972. Syntactic typology and contrastive studies, Part II: The grammar of relative clauses. EREC, ED-067961.
- Boadi, L.A., 1975. The associative in Akan: a semantic interpretation. Lingua, Vol. 36:209-230.
- Garcia, E., 1975. The role of theory in linguistics analysis: The Spanish Pronoun System. Amsterdam: North Holland.
- Kirsner, R.S. & S.A. Thompson, 1973. The role of pragmatic inference in semantics: a study of sensory verb complements in English. Glossa, 10:2, 200-240.
- Kuroda, S-Y, 1974. Pivot-independent relativization in Japanese (I). Papers in Japanese Linguistics, Vol. 3.
- Matisoff, J.A., 1972. Lahu nominalization, relativization and genitivization. Syntax and Semantics, ed. by John R. Kimball. Seminar Press.
- McCawley, J.D., 1972. Japanese relative clauses. The Chicago which hunt: papers from the relative clause festival, CLS.
- Munro, P., 1974. Topics in Mojave Syntax. Ph. D. Diss., University of California, San Diego.
- Oono, S., 1952. 日本語の動詞の活用形の起源について  
'On the origin of conjugation forms of Japanese verbs'  
Kokugo to Kokubungaku. Vol. 30.
- Welmers, W.E., 1963. Associative a and ka in Niger Congo. Language, 39:432-447.